CLAIMS:

1. A system comprising:

data storage tape comprising first and second sides;

a turntable; and

a head mounted on the turntable, wherein the turntable rotates to allow the head to access the first and second sides of the data storage tape.

2. The system of claim 1, wherein the head accesses the first and second sides by contacting the first and second sides.

3. The system of claim 1, wherein the turntable rotates to position the head in a first position and a second position.

4. The system of claim 3, wherein the first position of the head comprises approximately 180 degrees of rotation of the turntable relative to the second position of the head.

5. The system of claim 1, wherein the turntable moves relative to a tape path of the data storage tape.

6. The system of claim 5, wherein the turntable lowers to descend the head below the tape path of the data storage tape.

7. The system of claim 5, wherein the turntable raises to elevate the head into the tape path of the data storage tape.

8. The system of claim 1, further comprising a set of guides to facilitate contact of the head with the first and second sides of the data storage tape.

9. The system of claim 8, wherein only a subset of the set of guides contact the data storage tape.

10. The system of claim 1, wherein the head comprises a head selected from a group consisting of: a magnetic read head, a magnetic write head, a magnetic read/write head, a servo write head, and a servo verify head.

11. The system of claim 1, wherein data storage tape comprises tape selected from a group consisting of: magnetic tape, magneto-optical tape, optical tape, and holographic tape.

12. A data storage tape drive comprising a head mounted on a turntable, wherein the turntable rotates to allow the head to access first and second sides of a data storage tape.

13. The data storage tape drive of claim 12, wherein the head accesses the first and second sides by contacting the first and second sides.

14. The data storage tape drive of claim 12, wherein the turntable rotates to position the head in a first position and a second position.

15. The data storage tape drive of claim 14, wherein the first position of the head comprises approximately 180 degrees of rotation of the turntable relative to the second position of the head.

16. The data storage tape drive of claim 12, wherein the turntable moves relative to a tape path of the data storage tape.

17. The data storage tape drive of claim 16, wherein the turntable lowers to descend the head below the tape path of the data storage tape.

18. The data storage tape drive of claim 16, wherein the turntable raises to elevate the head into the tape path of the data storage tape.

19. The data storage tape drive of claim 12, wherein the head comprises a head selected from a group consisting of: a magnetic read head, a magnetic write head, a magnetic read/write head, a servo write head, and a servo verify head.

20. A method comprising:

accessing a first side of a data storage tape with a head mounted on a turntable;

rotating the turntable; and

accessing a second side of the data storage tape with the head.

21. The method of claim 20, wherein accessing the first side comprises contacting the first side with the head and accessing the second side comprises contacting the second side with the head.

22. The method of claim 20, further comprising:

positioning the head in a first position;

feeding the data storage tape into proximity of the head when the head is positioned in the first position;

rotating the turntable to position the head in a second position to access the first side of the data storage tape;

removing the data storage tape from proximity of the head;

positioning the head in the second position;

feeding the data storage tape into proximity of the head when the head is positioned in the second position; and

rotating the turntable to position the head in the first position to access the second side of the data storage tape.

23. The method of claim 22, wherein the first position of the head comprises approximately 180 degrees of rotation of the turntable relative to the second position of the head.

24. The method of claim 20, further comprising:

positioning the head in a first position;

rotating the turntable to position the head in a second position to access the first side of the data storage tape;

rotating the turntable back to the first position;

lowering the turntable relative to a tape path of the data storage tape such that the head is below the tape path;

rotating the turntable back to the second position;

raising the turntable relative to the tape path of data storage tape such that the head is in the tape path; and

rotating the turntable to position the head in the first position to access the second side of the data storage tape.

25. The method of claim 24, wherein the first position of the head comprises approximately 180 degrees of rotation of the turntable relative to the second position of the head.